

• DOCKET NO.: MSFT-1587/302202.1
Application No.: 10/603,037
Office Action Dated: May 10, 2006

PATENT
REPLY FILED UNDER EXPEDITED
PROCEDURE PURSUANT TO
37 CFR § 1.116

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A method for improving data processing in connection with a database, said method comprising:

defining a dimension comprising a plurality of attributes;

assigning each attribute to a respective column of said database; and

defining relationships between said attributes, wherein said relationships are not subject to restrictions placed on said database and;

accessing said database via said dimension.

2. (Canceled)

3. (Original) A method in accordance with claim 1, further comprising:

defining at least one hierarchy comprising a sequence of said attributes.

4. (Original) A method in accordance with claim 3, wherein each hierarchy defines a drill down path for accessing said database.

5. (Original) A method in accordance with claim 3, wherein a hierarchy contains one attribute.

6. (Original) A method in accordance with claim 3, wherein said act of defining said at least one hierarchy is independent of said database.

7. (Canceled)

8. (Original) A method in accordance with claim 1, wherein said database is a relational database.

9. (Original) A method in accordance with claim 1, wherein said dimension is utilized with an on line analysis processing (OLAP) system.

10. (Original) An application programming interface (API) comprising means for performing the method of claim 1.

11. (Currently Amended) A computer-readable medium comprising at least one of volatile and non-volatile storage having computer-executable instructions for improving data processing in connection with a database by performing acts comprising:

defining a dimension comprising a plurality of attributes;

assigning each attribute to a respective column of said database; and

defining relationships between said attributes, wherein said relationships are not subject to restrictions placed on said database and;

accessing said database via said dimension.

12. (Canceled)

13. (Original) A computer-readable medium in accordance with claim 11, further having computer-executable instructions for defining at least one hierarchy comprising a sequence of attributes.
14. (Original) A computer-readable medium in accordance with claim 13, wherein each hierarchy defines a drill down path for accessing said database.
15. (Original) A computer-readable medium in accordance with claim 13, wherein a hierarchy contains one attribute.
16. (Original) A computer-readable medium in accordance with claim 13, wherein said act of defining said at least one hierarchy is independent of said database.
17. (Canceled)
18. (Original) A computer-readable medium in accordance with claim 11, wherein said database is a relational database.
19. (Original) A computer-readable medium in accordance with claim 11, wherein said dimension is utilized with an on line analysis processing (OLAP) system.
20. (Previously Presented) A system for accessing a database, said system comprising:
a processor coupled to a storage device, said storage device comprising said database;

a first definition component for defining a dimension comprising a plurality of attributes;

an assignment component for assigning each attribute to a respective column of said database;

a second definition component for defining relationships between said attributes, wherein said relationships are not subject to restrictions placed on said database; and

an access component for allowing access to said database via said dimension.

21. (Original) A system in accordance with claim 20, further comprising:
a third definition component for defining at least one hierarchy within each dimension, each hierarchy comprising a sequence of attributes.
22. (Original) A system in accordance with claim 21, wherein each hierarchy defines a drill down path for said access component.
23. (Original) A system in accordance with claim 21, wherein a hierarchy contains one attribute.
24. (Original) A system in accordance with claim 21, wherein said third definition component defines said at least one hierarchy independent of said database.
25. (Canceled)

26. (Original) A system in accordance with claim 20, wherein said system is utilized with an on line analysis processing (OLAP) system.
27. (Previously Presented) A system for accessing a database, said system comprising:
means for defining a dimension comprising a plurality of attributes;
means for assigning each attribute to a respective column of said database;
means for defining relationships between said attributes, wherein said relationships are not subject to restrictions placed on said database;
means for accessing said database via said dimension; and
means for defining at least one hierarchy comprising a sequence of said attributes.
28. (Canceled)
29. (Original) A system in accordance with claim 27, wherein said at least one hierarchy is defined independent of said database.
30. (Original) A system in accordance with claim 27, wherein said system is an on line analysis processing (OLAP) system.
31. (Original) A system in accordance with claim 27, wherein said means for defining a dimension, means for assigning, means for defining relationships, means for accessing and means for defining at least one hierarchy comprise at least one application programming interface (API).

32. (Currently Amended) A computer-readable medium in accordance with claim 11 comprising a data structure embodied by at least one computer readable medium, comprising:
- the a dimension comprising the a plurality of attributes, wherein each attribute is bound to a column in a database; and
- a logical structure indicative of relationships between said plurality of attributes, wherein said relationships are not subject to restrictions placed on said database.
33. (Original) A data structure in accordance with claim 32, said data structure further comprising at least one hierarchy comprising a sequence of attributes.
34. (Original) A data structure in accordance with claim 33, wherein each hierarchy provides a drill down path for accessing said database.
35. (Original) A data structure in accordance with claim 33, wherein a hierarchy contains a single attribute.
36. (Original) A data structure in accordance with claim 33, wherein each sequence is defined independent of restrictions associated with said database.
37. (Original) A data structure in accordance with claim 32, wherein said logical structure is defined independent of restrictions associated with said database.

38. (Original) A data structure in accordance with claim 32, wherein said database is a relational database.

39. (Original) A data structure in accordance with claim 32, wherein said database is capable of being utilized with an online analytical processing (OLAP) system.

40. (Previously Presented) A method for retrieving data from a database, said method comprising:

receiving a data retrieval request including a dimension, wherein:

 said dimension includes a plurality of attributes;

 each attribute is assigned to a respective column of said database; and

 relationships between said attributes are defined, wherein said relationships are not subject to restrictions placed on said database; and

retrieving said data from said database via said dimension.

41. (Original) A method in accordance with claim 40, further comprising:

 providing said retrieved data in response to said data retrieval request.

42. (Original) A method in accordance with claim 40, said data retrieval request further including at least hierarchy comprising a sequence of said attributes.

43. (Original) A method in accordance with claim 42, wherein each hierarchy provides a drill down path for accessing said database.

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44. (Original) A method in accordance with claim 42, wherein a hierarchy contains a single attribute.

45. (Original) A method in accordance with claim 42, wherein each sequence is defined independent of restrictions associated with said database.

46. (Original) A method in accordance with claim 40, wherein said relationships between said attributes are defined independent of restrictions associated with said database.

47. (Original) A method in accordance with claim 40, wherein said database is a relational database.

48. (Original) A method in accordance with claim 40, wherein said database is capable of being utilized with an online analytical processing (OLAP) system.